

6590  
1028

#10

OIPE

ENTERED

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/083,936B

DATE: 11/06/2002  
TIME: 14:56:03

Input Set : A:\108236-130.ST25.txt  
Output Set: N:\CRF4\11062002\J083936B.raw

4 <110> APPLICANT: Moore, Jeffrey G.  
6 <120> TITLE OF INVENTION: Compositions and Methods for Protecting Tissues and  
7 Cells from Damage, and for Repairing Damaged Tissues  
9 <130> FILE REFERENCE: 108236.130  
11 <140> CURRENT APPLICATION NUMBER: US 10/083,936B  
C--> 12 <141> CURRENT FILING DATE: 2002-10-22  
14 <150> PRIOR APPLICATION NUMBER: US 60/271,666  
15 <151> PRIOR FILING DATE: 2001-02-27  
17 <150> PRIOR APPLICATION NUMBER: US 60/302,716  
18 <151> PRIOR FILING DATE: 2001-07-03  
20 <160> NUMBER OF SEQ ID NOS: 10  
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
24 <210> SEQ ID NO: 1  
25 <211> LENGTH: 939  
26 <212> TYPE: DNA  
27 <213> ORGANISM: Dolichos lablab  
29 <400> SEQUENCE: 1  
30 gcacagtcat tgtcatttag tttcaccaag tttgatccta accaagagga tcttatcttc 60  
31 caaggcatg ccacttctac aaacaatgtc ttacaagtca ccaagttaga cagtcagga 120  
32 aaccctgtga gttctagtgc gggaaagagtg ttatattctg caccattgcg ccttggaa 180  
33 gactctgcgg tattgacaag ctttgacacc attatcaact ttgaaatctc aacaccttac 240  
34 acttctcgta tagctgatgg cttggccttc ttcatgcac cacctgactc tgtcatcagt 300  
35 tatcatggtg gtttcttgg actcttccc aacgcaaaca ctctcaacaa ctctccacc 360  
36 tctgaaaacc aaaccaccac taaggctgca tcaagcaacg ttgttgctgt tgaatttgac 420  
37 acctatctta atcccgattta tggtgatcca aactacatac acatcggat tgacgtcaac 480  
38 tctattagat ccaaggtaac tgctaagtgg gactggcaaa atggaaaat agccactgca 540  
39 cacattagct ataactctgt ctctaaaaga ctatctgttta ctatctgttata tgctggagt 600  
40 aaacctgcga ctctctccta tgatattgag ttacatacag tgcttcctga atgggtcaga 660  
41 gtagggttat ctgcttcaac tggacaagat aaagaaagaa ataccgttca ctcatggtct 720  
42 ttcaacttcaa gcttggtggac caatgtggcg aagaaggaga atgaaaacaa gtatattaca 780  
43 agaggcggtc tgtgatgata tatgtgtatc aatgattttc tatgttataa gcatgtaatg 840  
44 tgcgatgagt caataatcac aagtacagtg tagtacttgt atgttggtg tgtaagagtc 900  
45 agtttgcttt taataataac aagtgcagtt agtacttgt 939  
48 <210> SEQ ID NO: 2  
49 <211> LENGTH: 264  
50 <212> TYPE: PRT  
51 <213> ORGANISM: Dolichos lablab  
53 <400> SEQUENCE: 2  
54 Ala Gln Ser Leu Ser Phe Ser Phe Thr Lys Phe Asp Pro Asn Gln Glu  
55 1 5 10 15  
57 Asp Leu Ile Phe Gln Gly His Ala Thr Ser Thr Asn Asn Val Leu Gln  
58 20 25 30  
60 Val Thr Lys Leu Asp Ser Ala Gly Asn Pro Val Ser Ser Ala Gly

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Input Set : A:\108236-130.ST25.txt  
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61	35	40	45	
63	Arg Val Leu Tyr Ser Ala Pro Leu Arg Leu Trp Glu Asp Ser Ala Val			
64	50	55	60	
66	Leu Thr Ser Phe Asp Thr Ile Ile Asn Phe Glu Ile Ser Thr Pro Tyr			
67	65	70	75	80
69	Thr Ser Arg Ile Ala Asp Gly Leu Ala Phe Phe Ile Ala Pro Pro Asp			
70	85	90	95	
72	Ser Val Ile Ser Tyr His Gly Gly Phe Leu Gly Leu Phe Pro Asn Ala			
73	100	105	110	
75	Asn Thr Leu Asn Asn Ser Ser Thr Ser Glu Asn Gln Thr Thr Thr Lys			
76	115	120	125	
78	Ala Ala Ser Ser Asn Val Val Ala Val Glu Phe Asp Thr Tyr Leu Asn			
79	130	135	140	
81	Pro Asp Tyr Gly Asp Pro Asn Tyr Ile His Ile Gly Ile Asp Val Asn			
82	145	150	155	160
84	Ser Ile Arg Ser Lys Val Thr Ala Lys Trp Asp Trp Gln Asn Gly Lys			
85	165	170	175	
87	Ile Ala Thr Ala His Ile Ser Tyr Asn Ser Val Ser Lys Arg Leu Ser			
88	180	185	190	
90	Val Thr Ser Tyr Tyr Ala Gly Ser Lys Pro Ala Thr Leu Ser Tyr Asp			
91	195	200	205	
93	Ile Glu Leu His Thr Val Leu Pro Glu Trp Val Arg Val Gly Leu Ser			
94	210	215	220	
96	Ala Ser Thr Gly Gln Asp Lys Glu Arg Asn Thr Val His Ser Trp Ser			
97	225	230	235	240
99	Phe Thr Ser Ser Leu Trp Thr Asn Val Ala Lys Lys Glu Asn Glu Asn			
100	245	250	255	
102	Lys Tyr Ile Thr Arg Gly Val Leu			
103	260			
106	<210> SEQ ID NO: 3			
107	<211> LENGTH: 1005			
108	<212> TYPE: DNA			
109	<213> ORGANISM: Dolichos lablab			
111	<400> SEQUENCE: 3			
112	atggcttcct ccaacttact caccctagcc ctcttccttg tgcttctcac ccacgc当地 60			
113	tcagccgcac agtcattgtc atttagttc accaagttt atcctaacc a gaggatctt 120			
114	atcttccaag gtcatgccac ttctacaaac aatgtttac aagtccacaa gtttagacagt 180			
115	gcaggaaacc ctgtgagttc tagtgcggga agagtttat attctgcacc attgc当地 240			
116	tggaaagact ctgcgttatt gacaagctt gacaccatta tcaactttga aatctcaaca 300			
117	ccttacactt ctcgtatagc tgatggctt gccttctca ttgcaccacc tgactctg 360			
118	atcagttatc atgggtgtt tcttggactc tttcccaacg caaacactct caacaactct 420			
119	tccacctctg aaaaccaaaac caccactaag gctgcatcaa gcaacgttgt tgctgtgaa 480			
120	tttgacacct atcttaatcc cgattatgtt gatccaaact acatacacat cggaaattgac 540			
121	gtcaactcta ttagatccaa ggtaactgct aagtggact ggc当地atgg gaaaatagcc 600			
122	actgcacaca ttagctataa ctctgtctct aaaagactat ctgttacttag ttattatgct 660			
123	gggagtaaac ctgcgactct ctcctatgtat attgagttac atacagtgtt tcctgaatgg 720			
124	gtcagagtag ggttatctgc ttcaactgga caagataaaag aaagaaatac cgttcactca 780			
125	tggctttca cttcaagctt gttggaccaat gttggc当地aaaggaaatga aaacaaggat 840			
126	attacaagag gcgttctgtg atgatataatg tttatcaatg ttataaggat 900			

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127 gtaatgtgcg atgagtcaat aatcacaagt acagtgtagt acttgtatgt tgtttgtgta 960  
 128 agagtcagg tgcttttaat aataacaagt gcagtttagta cttgt 1005  
 131 <210> SEQ ID NO: 4  
 132 <211> LENGTH: 22  
 133 <212> TYPE: PRT  
 134 <213> ORGANISM: Dolichos lablab  
 136 <400> SEQUENCE: 4  
 137 Met Ala Ser Ser Asn Leu Leu Thr Leu Ala Leu Phe Leu Val Leu Leu  
 138 1 5 10 15  
 140 Thr His Ala Asn Ser Ala  
 141 20  
 144 <210> SEQ ID NO: 5  
 145 <211> LENGTH: 914  
 146 <212> TYPE: DNA  
 147 <213> ORGANISM: Phaseolus vulgaris  
 149 <400> SEQUENCE: 5  
 150 gctcagtcat tatctttaa ctttaccaag tttgatctt accaaaaaga tcttatcttc 60  
 151 caaggtgatg ccacttctac aaacaatgtc ttacaactca ctaagttaga cagtggagga 120  
 152 aaccctgtgg gtgctagtgt gggaaagagtg ttattctctg caccatttca tctttgggaa 180  
 153 aactctatgg cagtcgtcaag ctttggaaact aatctccatca ttcaaatctc aacacccac 240  
 154 ctttattatgg cagctgtatgg ctttgccttc ttccatgtcac cacatgacac tgcatccct 300  
 155 ccaatttctt ggggcaatt ctttggactc tactcaaacc ttttcagaaa ctccccccacc 360  
 156 tctgaaaaacc aaagctttgg tgatgtcaat actgactcaa gagttgtgc tgcattttt 420  
 157 gacacccccc ctaatgcca tattgatcca aattacagac acattggaaat cgatgtgaac 480  
 158 tctattaaatg ccaaggaaac tgcttaggtgg gagtggcaaa atgggaaaac ggcactgca 540  
 159 cgcatttcgtcataactctgc ctctaaaaaa tcaactgtt ctacgtttt tcctggatg 600  
 160 gaagttgtgg ctctctccca tgatgttgc ttacatgcag agcttcctga atgggttaga 660  
 161 gtagggttat ctgcttcaac tggagaggag aaacaaaaaa ataccattat ctcatggtct 720  
 162 ttcacttcaa gcttgaagaa caacggatgg aaggagccga aagaagacat gtatattgca 780  
 163 aacgttgtgc gatcatatac atggatcaat gacgttctat cttatataag caataaataa 840  
 164 atgtatgtatg cactcaataa taatcacaag tacgtacggt gtagtacttg tatgttgg 900  
 165 atgaaaaaaaaaaaa 914  
 168 <210> SEQ ID NO: 6.  
 169 <211> LENGTH: 303  
 170 <212> TYPE: PRT  
 171 <213> ORGANISM: Phaseolus vulgaris  
 173 <400> SEQUENCE: 6  
 174 Ala Gln Ser Leu Ser Phe Asn Phe Thr Lys Phe Asp Leu Asp Gln Lys  
 175 1 5 10 15  
 176 Asp Leu Ile Phe Gln Gly Asp Ala Thr Ser Thr Asn Asn Val Leu Gln  
 177 20 25 30  
 178 Leu Thr Lys Leu Asp Ser Gly Gly Asn Pro Val Gly Ala Ser Val Gly  
 179 35 40 45  
 180 Arg Val Leu Phe Ser Ala Pro Phe His Leu Trp Glu Asn Ser Met Ala  
 181 50 55 60  
 182 Val Ser Ser Phe Glu Thr Asn Leu Thr Ile Gln Ile Ser Thr Pro His  
 183 65 70 75 80  
 184 Pro Tyr Tyr Ala Ala Asp Gly Phe Ala Phe Phe Leu Ala Pro His Asp  
 185 85 90 95

RAW SEQUENCE LISTING  
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Input Set : A:\108236-130.ST25.txt  
Output Set: N:\CRF4\11062002\J083936B.raw

186 Thr Val Ile Pro Pro Asn Ser Trp Gly Lys Phe Leu Gly Leu Tyr Ser  
187 100 105 110  
188 Asn Val Phe Arg Asn Ser Pro Thr Ser Glu Asn Gln Ser Phe Gly Asp  
189 115 120 125  
190 Val Asn Thr Asp Ser Arg Val Val Ala Val Glu Phe Asp Thr Phe Pro  
191 130 135 140  
192 Asn Ala Asn Ile Asp Pro Asn Tyr Arg His Ile Gly Ile Asp Val Asn  
193 145 150 155 160  
194 Ser Ile Lys Ser Lys Glu Thr Ala Arg Trp Glu Trp Gln Asn Gly Lys  
195 165 170 175  
196 Thr Ala Thr Ala Arg Ile Ser Tyr Asn Ser Ala Ser Lys Lys Ser Thr  
197 180 185 190  
198 Val Thr Thr Phe Tyr Pro Gly Met Glu Val Val Ala Leu Ser His Asp  
199 195 200 205  
200 Val Asp Leu His Ala Glu Leu Pro Glu Trp Val Arg Val Gly Leu Ser  
201 210 215 220  
202 Ala Ser Thr Gly Glu Glu Lys Gln Lys Asn Thr Ile Ile Ser Trp Ser  
203 225 230 235 240  
204 Phe Thr Ser Ser Leu Lys Asn Asn Glu Val Lys Glu Pro Lys Glu Asp  
205 245 250 255  
206 Met Tyr Ile Ala Asn Val Val Arg Ser Tyr Thr Trp Ile Asn Asp Val  
207 260 265 270  
208 Leu Ser Tyr Ile Ser Asn Lys Met Tyr Asp Ala Leu Asn Asn Asn His  
209 275 280 285  
210 Lys Tyr Val Arg Cys Ser Thr Cys Met Leu Phe Met Lys Lys Lys  
211 290 295 300  
214 <210> SEQ ID NO: 7  
215 <211> LENGTH: 678  
216 <212> TYPE: DNA  
217 <213> ORGANISM: Sphenostylis stenocarpa  
219 <400> SEQUENCE: 7  
220 acgaagttcg acagcgacca aaaggatctt atgttccaag gtcataccat ttcttagcagc 60  
221 aatgtcatac aactcaccaa gttagacagt aatggaaacc ctgtgagtag cagtgtggga 120  
222 agagtgttat actctgcacc attgcgcctt tggaaagct ctacagtagt gtcaacacctt 180  
223 gagaccactt tcacccttca aatctcaaca ctttacacta gtcctctgg tgatgggctc 240  
224 gccttcttcc ttgcaccata tgacactgtc atccctccaa attctgtgg caatcttctt 300  
225 gactcttc ctaacttaaa tgcttaaga aactccacca ccagtaaaga aaccactatt 360  
226 gatgtcaatg ctgcatactaa caacgttgg gccgttgaat ttgacaccta ccctaacgac 420  
227 aatattgggt atccaaagata caaacacatt ggaatcgatg tcaactctat caggtccaag 480  
228 gcaactgtt cgtgggactg gcaaaatggg aaaacagcca ctgcacacat cagctataac 540  
229 tctgcctcta aaagactatc tgttactact tttatcctg gggtaaagc tgtgagtctt 600  
230 tcccatgacg tttagctcac tcaagtgcctt cctcaatgga ttagagtagg gttctctgct 660  
231 tcaacaggat tagagaaa 678  
234 <210> SEQ ID NO: 8  
235 <211> LENGTH: 234  
236 <212> TYPE: PRT  
237 <213> ORGANISM: Sphenostylis stenocarpa  
239 <400> SEQUENCE: 8  
240 Ala Gln Ser Val Ser Phe Thr Phe Thr Lys Phe Asp Ser Asp Gln Lys

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/083,936B

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TIME: 14:56:03

Input Set : A:\108236-130.ST25.txt  
Output Set: N:\CRF4\11062002\J083936B.raw

241 1 5 10 15  
243 Asp Leu Met Phe Gln Gly His Thr Ile Ser Ser Ser Asn Val Ile Gln  
244 20 25 30  
246 Leu Thr Lys Leu Asp Ser Asn Gly Asn Pro Val Ser Thr Ser Val Gly  
247 35 40 45  
249 Arg Val Leu Tyr Ser Ala Pro Leu Arg Leu Trp Glu Ser Ser Thr Val  
250 50 55 60  
252 Val Ser Thr Phe Glu Thr Thr Phe Gln Ile Ser Thr Pro Tyr  
253 65 70 75 80  
255 Thr Ser Pro Pro Gly Asp Gly Leu Ala Phe Phe Leu Ala Pro Tyr Asp  
256 85 90 95  
258 Thr Val Ile Pro Pro Asn Ser Ala Gly Asn Leu Leu Gly Leu Phe Pro  
259 100 105 110  
261 Asn Leu Asn Ala Leu Arg Asn Ser Thr Thr Ser Lys Glu Thr Thr Ile  
262 115 120 125  
264 Asp Val Asn Ala Ala Ser Asn Asn Val Val Ala Val Glu Phe Asp Thr  
265 130 135 140  
267 Tyr Pro Asn Asp Asn Ile Gly Asp Pro Arg Tyr Lys His Ile Gly Ile  
268 145 150 155 160  
270 Asp Val Asn Ser Ile Arg Ser Lys Ala Thr Val Ala Trp Asp Trp Gln  
271 165 170 175  
273 Asn Gly Lys Thr Ala Thr Ala His Ile Ser Tyr Asn Ser Ala Ser Lys  
274 180 185 190  
276 Arg Leu Ser Val Thr Thr Phe Tyr Pro Gly Gly Lys Ala Val Ser Leu  
277 195 200 205  
279 Ser His Asp Val Glu Leu Thr Gln Val Leu Pro Gln Trp Ile Arg Val  
280 210 215 220  
282 Gly Phe Ser Ala Ser Thr Gly Leu Glu Lys  
283 225 230  
286 <210> SEQ ID NO: 9  
287 <211> LENGTH: 15  
288 <212> TYPE: PRT  
289 <213> ORGANISM: Sphenostylis stenocarpa  
291 <400> SEQUENCE: 9  
292 Ala Gln Ser Val Ser Phe Thr Phe Thr Lys Phe Asp Ser Asp Gln  
293 1 5 10 15  
295 <210> SEQ ID NO: 10  
296 <211> LENGTH: 16  
297 <212> TYPE: PRT  
298 <213> ORGANISM: Sphenostylis stenocarpa  
300 <220> FEATURE:  
301 <221> NAME/KEY: VARIANT  
302 <222> LOCATION: 14  
303 <223> OTHER INFORMATION: Xaa = Any Amino Acid  
305 <400> SEQUENCE: 10  
W--> 306 Ala Ala Ser Asn Asn Val Val Ala Val Glu Phe Asp Thr Xaa Pro Asn  
307 1 5 10 15

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/083,936B

DATE: 11/06/2002  
TIME: 14:56:05

Input Set : A:\108236-130.ST25.txt  
Output Set: N:\CRF4\11062002\J083936B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:10; Xaa Pos. 14

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/083,936B

DATE: 11/06/2002  
TIME: 14:56:05

Input Set : A:\108236-130.ST25.txt  
Output Set: N:\CRF4\11062002\J083936B.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0